

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1           1-41. (Canceled)

1           42. (Currently amended) A method for determining whether a test colon cell  
2 ~~from a given tissue~~ has an ~~inflammatory bowel disease (IBD) or pre-IBD ulcerative colitis~~  
3 ~~(UC) or Crohn's disease (CD)~~ phenotype, said method comprising:

4           (a) determining an expression level of a macrophage inflammatory protein-2 $\beta$  (GRO3)  
5 gene product[[,]] in said test colon cell;

6           (b) determining an expression level of a neutrophil lipocalin (HNL) gene product[[,]] in  
7 said test colon cell;

8           (c) determining an expression level of a macrophage elastase (MMP-12) gene product[[,]]  
9 in said test colon cell;

10          (d) determining an expression level of an elastase specific inhibitor (elafin) gene  
11 product[[, and]] in said test colon cell;

12          (e) determining an expression level of a type VI collagen  $\alpha$ 3 chain (COL6A3) gene  
13 product in said test colon cell;

14          [[(b)]] (f) comparing the expression level of each of said gene products in said test colon  
15 cell to an expression level of the same gene product in a control normal colon cell of the given  
16 tissue type; [[and]]

17          [[(c)]] (g) associating a difference an increase in the expression level of at least one of  
18 said gene products said GRO3 gene product, said HNL gene product, said MMP-12 gene  
19 product, said elafin gene product, or said COL6A3 gene product in said test colon cell [[from]]  
20 relative to the expression level of the same gene product in said control normal colon cell with  
21 an IBD or pre-IBD a UC phenotype in said test colon cell; and

22           (h) associating an increase in the expression level of said MMP-12 gene product or said  
23       elafin gene product in said test colon cell relative to the expression level of the same gene  
24       product in said normal colon cell with a CD phenotype in said test colon cell.

1           43.      (Canceled)

1           44.      (Canceled)

1           45.      (Currently amended) The method of claim 42, comprising distinguishing  
2       between a UC [[and]] or CD phenotype in said test colon cell.

1           46.      (Currently amended) The method of claim 42, wherein the expression  
2       level of ~~at least one of said gene products differs from~~ said GRO3 gene product in said test  
3       colon cell is increased relative to the expression level of the same gene product in said ~~control~~  
4       normal colon cell by at least a factor of two.

1           47.      (Currently amended) The method of claim 42, wherein said test colon cell  
2       is obtained from a needle biopsy core, a surgical resection sample, or a bowel sample, ~~lymph~~  
3       node tissue, or serum.

1           48.      (Previously presented) The method of claim 42, wherein the expression  
2       level of said gene products is determined using Northern blot analysis, reverse transcription-  
3       polymerase chain reaction, in situ hybridization, or an array.

1           49.      (Previously presented) The method of claim 48, wherein said array  
2       comprises:

3           (a) nucleic acid probes of 12-40 nucleotides in length, wherein said nucleic acid probes  
4       are complementary to said gene products and hybridize under high stringency conditions to said  
5       gene products; and

6           (b) a substrate to which said nucleic acid probes are bound.

1               50. (Previously presented) The method of claim 49, wherein said substrate is  
2 selected from the group consisting of paper, membranes, filters, chips, pins, and glass.

1               51. (Previously presented) The method of claim 49, wherein said nucleic acid  
2 probes are bound to said substrate by covalent bonds or hydrophobic interactions.

1               52. (Previously presented) The method of claim 49, wherein said nucleic acid  
2 probes are spotted onto said substrate in a two-dimensional matrix or array.

1               53. (New) The method of claim 42, wherein the expression level of said HNL  
2 gene product in said test colon cell is increased relative to the expression level of the same gene  
3 product in said normal colon cell by at least a factor of two.

1               54. (New) The method of claim 42, wherein the expression level of said  
2 MMP-12 gene product in said test colon cell is increased relative to the expression level of the  
3 same gene product in said normal colon cell by at least a factor of two.

1               55. (New) The method of claim 42, wherein the expression level of said  
2 elafin gene product in said test colon cell is increased relative to the expression level of the same  
3 gene product in said normal colon cell by at least a factor of two.

1               56. (New) The method of claim 42, wherein the expression level of said  
2 COL6A3 gene product in said test colon cell is increased relative to the expression level of the  
3 same gene product in said normal colon cell by at least a factor of two.